

The DX Bulletin

America's Premier Weekly Amateur Radio Publication

SPECIAL REPORT

Sunspot Cycle 22

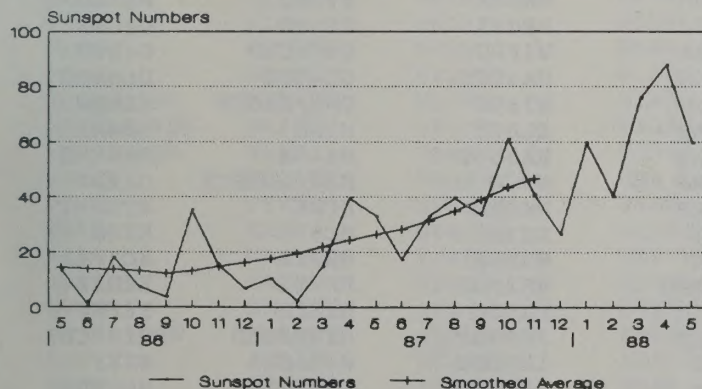
The accelerating pace of the current sunspot cycle slowed in May, as the average sunspot number for the month dropped to 59.7, from 88.0 in April, 1988. Similar variations are common on a month-to-month basis, as the graph below shows.

Although the average sunspot number dropped for May, the 13-month smoothed sunspot number for November, 1987, increased to 46.7, from 43.6 the previous month. The smoothed sunspot number is still ahead of the pace of any other sunspot cycle, even the legendary Cycle 19.

The next six months will tell us a great deal about Cycle 22. If the sunspots continue to increase at an accelerating pace for the rest of 1988, we will be well ahead of Cycle 19, and be enjoying on a daily basis the fantastic conditions we had in early June.

The Space Environment Services Center predicts that the smoothed sunspot number will increase to 100 by July 1988, and to 170 by mid-1989. [Because the 13-month smoothed sunspot number includes six months before and after the month in question, we cannot compute smoothed figures until six months after the month. We won't know the figure for July 1988 until the end of the year.]

Sunspot Numbers Raw Data



The SESC also predicts a dramatic increase in the number of solar flares over the next year. During the past year, we suffered through an average of fewer than five flares per month. The SESC predicts an average of 30 flares per month over the next year.

AWARDS

You Don't Tie Up At A DOK!

By Ted Melinosky K1BV

You don't because DOK stands for Districts/Ortver-bands Kenner, or Districts Area Locator in German. Look at a typical West German QSL. In almost every case, you will see a notation such as "DOK F09". This is a geographical indicator (mostly), somewhat like the USA county system. It is also the basis for a large number of West German awards.

Most active DXers have large numbers of DL cards and probably have earned several of their awards that are based on contacts with hams in different DOK's.

Keeping records of your DOK's requires an effort at first, but is well worth the work. I use a simple method of taking one 8 1/2 x 11 page and mark the top right for each letter of the alphabet. I then number in 2 columns on the page 01 to 40 and 41 to 80. Then pick up your first German card and start. If DA1SB is F09, turn to the F page, and opposite the 09, write the call. Then keep your records up to date as batches come in from the Bureau.

The premier award involving contacts with DOK's is the DLD, sponsored by DARC. There are many levels of this award, starting at 100 DOK's and going up to 1000. This award, like the Worked All Britain, can be a lifetime achievement goal. A special application is required and it is suggested you write to the current sponsor for full rules and forms: H.P. Guenther DL9XW, Am Strampel 22, D-4460 Nordhorn, W.Germany.

Three of the many DOK based awards are:

Toepfer Diploma. Contact 6 stations in DOK K31 after 1 November 1975. No mode or band restrictions. GCR list and DM5 or 10 IRC's to Rudi Haus DK6WD, Altstrabe 24, D-5522 Speicher, West Germany.

Zollern Alb Award. Contact stations in DOK's P30, P34 and P44 after 1 Jan 1979. Europeans need 6, others need 3 on HF. On VHF, 10 are needed. Required contact with DL0AZ which counts for two of the needed QSOs. SWL OK. GCR list and US\$3 or 7 IRC's to: Peter Muschialik DL4GT, Olgastrasse 24, D-7474 Bitz Wurt, W. Germany.

Worked All Frankfurt. Make contacts in Frankfurt, DOK F05 since 1 Jan 1960. Each such QSO counts for 1 point and station DL0WO counts 5 points. Germans and others Europeans need 25 points; rest of world needs 15. Issued in 5 versions, Short-Wave: CW, phone or mixed, VHF: SWL or RTTY. Free to blind and disabled amateurs. GCR list and DM5 or 10 IRC's to J. Hillman DL6QX, Pfungst-Str. 3, D-6000 Frankfurt/M, West Germany.

[K1BV publishes the K1BV DX Awards Directory. The 1988 edition of the Awards Directory includes rules for over 830 awards from 99 DXCC countries. The 200+-page directory costs \$14.35 including surface postage (CT residents add \$1.08 sales tax) from Ted Melinosky K1BV, The K1BV DX Awards Directory, 525 Foster Street Suite 1001, South Windsor CT 06074 USA. For DX stations, costs are US\$13.75 by surface mail, or US\$18.00 by airmail.]

QSL INFORMATION

QSL Help Wanted

- FB8XY for K7XN. A card to the address in Issue 425 was returned "Not at this address," any help?
- P4A and 5U7LD for W8RT.
- DX9HT EA6VQ GV2WMM IO4WMM 4X8T 5N2KRC and 6YAA for KJ4BK.
- 3B9CD March 1985 for KU0A. No answer from 3B8CD.
- TN8BU Apr 1969, Z21FR Dec 1982, YT3C May 1983, PI4KST/4 May 1985, 8J8IYY Jun 1985, and YZ9A Oct 1985, for W7CRT.
- FB9WK Nov 1983, for K0CVD. Mail returned from Box 190, Mazamet.
- W5BE/HR6 Nov 1982, for JH1IFS.
- VP8BGA for KI6YE.
- and OH0/DL7AKC Apr 1987 for WB8SFF. No answer from DL7AKC.

QSL Help Offered

- ET2US's op in 1962 was Dick Cormier.
- CR7CI was Antonio Luiz Figueriredo, Aeroporto DETA, Box 276, Loreko Marks.
- VR1B was Charles Hawker. QSL via VK2EG.
- VS6EY is Victor Kershaw, 4 Hampshire Road, Kaloon Tong, Hong Kong.

DX Callsign	QTH Information
5N0SKO	Sagoe, Box 1832, Lagos, Nigeria
9J0A	Box 32621, Lusaka, Zambia
CE0GHO	Box 1, Easter Island, Chile
EP2DL	Box 17845-151, Tehran, Iran
EP2HZ	Box 16765-3133, Tehran, Iran
OA9K	Box 713, Iquitos, Peru
PZ2AC	Box 4224, Nickerie, Surinam
TA2/N4EXR	Glenn Whited, PSC Box 208, APO NY 09254
TG9YV	Box 362, Guatemala City, Guatemala
TU4CO	Box 12 BP 54, Abidjan, Ivory Coast
TZ6KL	Larry Schulz, Protestant Mission, Kenieba, Mali
VU2JX	J. Shrinivasan, 340 Block 1 Karamangaia Bangalore 560 034 India
ZD8HCF	Dick Lord, Box 5220, Patrick AFB, FL 32925-1220

QSL Notes

- QSL 4K1A via UA1DJ, Boris V. Gnusov, Box 1, Leningrad 196070, USSR,
- Art ZL2HE reports he is QSL manager for: ZL2BKM/C ZL7BKM ZL5BKM ZL5MC ZL4DE/C ZL2BCF/A ZL1BIQ/K ZL3AFH/A, but not ZL8AFH. QSL all to A.E.Law, R.D.2, Dannevirke, New Zealand with US\$1, 3 IRCs or mint stamps. Please spell town correctly.
- KA1XN still has no logs from A4XKC, so he can't answer cards. No need for second (nor third) request for cards. A4XKC has promised logs "soon."
- KH2F says DXers who cannot wait for cards via QSL manager N2AU can QSL direct to 28046 F Street, APO San Francisco CA 96334.
- LU8DPM, QSL manager for many South American stations such as LS1E LU2E AY2E CX2DC ZP0JCY and others reports that he has not received any cards via the bureau system in more than two years. If you need a card from LU8DPM, please QSL direct.

QSL	Via	QSL	Via	QSL	Via
Z21BA	N5FTR	V31JZ	NN7A	VP2ERA	N6CW
PA6DX	PA0COR	5K7U	HK7II	VS6UP	KB7G
P40X	KA1XN	T77V	G4UCB	8P9X	K4FJ
8P9HR	K4BAI	FJ0A	F6CYV	8P6PW	KA4S
8P9HU	K4BAI	DA2ER	W8IMZ	8P9HQ	K3ZR
5L2T	K4BAI				

DX CALL
 3A/DJ6QT
 3A/DL8DAS
 3B8DB
 3B9FR
 3C1MB
 3D2VU
 3D2ZZ
 3DA0AN
 3DA0BW
 4K0D
 4K0DC
 4K0DX
 4K1A
 4K1J
 4M3B
 4N7M
 4N7N
 4S7NMR
 4S7RO
 4U1UN
 4X6VV
 4Z5UX
 5H1HK
 5H3BH
 5K7U
 5N0WRE
 5T0RIM
 5T5CJ
 5T5DX
 5T5EV
 5T5NU
 5T5RA
 5V7SA
 5V7WD
 5W1GX
 5W1TT
 5Z4ET
 6W6JX
 6W6NJ
 6Y5DA
 7P8DP
 8P9EQ
 8Q7MT
 8Q7VG
 8Q7XF
 8Q7XI
 9H1FBS
 9J2AL
 9J2EZ
 9L1GG
 9M2AX
 9N1MM
 9Q5DA
 9Q5NW
 9Q5UN
 9V1TJ
 9X5AA
 9Y4DR
 9Y4VU
 A15AB
 A22RB
 A35WJ
 A4XKB
 AT0T
 AT0Z
 AX3ABO
 AX9LM
 AX9LZ
 AY6D
 AZ4M
 BV2DA
 C31LBL

QSL TO
 DJ6QT
 DL8DAS
 K5BDX
 F6FNU
 EA7KF
 DB5UJ
 4X6TT(88CB)
 WK4Y
 AK1E
 RA3YA
 VE3CDX
 VE3CDX
 UA1DJ
 UA1BJ
 YV3BKC
 YU7KMN
 YU7BPQ
 KZ8Y
 DJ9ZB
 NA2K
 WA7WOC
 4Z4UX
 JH4RHF
 SM0EAI
 HK7II
 K4JZQ
 W4JVU
 W4BAA
 W4JVU
 DL3KCE
 F6FNU
 W4JVU
 WB4LFM
 WB4LFM
 HB9CVX
 4X6TT(88CB)
 N5DFT
 F6FNU
 N5GAP
 VE4JK
 W8JBI
 VE2XB
 JI1DBQ
 GW3WVG
 G3TXF
 VK3DXI
 N5APW
 WD0HHM
 I4FGG
 N4DW
 JA5DQH
 N7EB
 KC4NC
 AL7EL
 OH3GZ
 K0GYK
 W4FRU
 WA4CUU
 W3EVW
 DL8CM
 KA3OYY
 W9GW
 N4GNR
 KE3A
 W3HNC
 VK3ABO
 DJ5CQ
 JH9GRM
 LU1DJU
 LU1MPM
 DL7FT
 EA3DDP

DX CALL
 C53FV
 C53GP
 C56/DL6NA
 C56/OZ3IG
 CE2LZN
 CI8C
 CI8COP
 CI8CW
 CI8JH
 CI8XN
 CN8EL
 CN8FC
 CP8XA
 CR3EU
 CT3EU
 CY0SAB
 DK2SC/4S7
 EA6WV
 EA6ZY
 EK0AA
 EL2JM
 EL2MS
 EL2X
 EL8N
 EX0DR
 F2JD/A6
 FH5EF
 FJ0A
 FJ5BL
 FK0AW
 FK8/DL4MBE
 FK8FI
 FM5BH
 FM5CL
 FM5ES
 FM5FA
 FM5WD
 FO/DL4MBE
 FO0AQ
 FO0BY
 FO0MWA
 FO0ZR
 FO8AA
 FR5ES
 FR5ES/J
 FS/W1FC
 FT0WA
 FT2XE
 FT5YB
 FT5ZB
 FV8NDX
 FW/IK2CKR
 FW/IK2GNW
 FY0EK
 FY5YE
 GB5CO
 GB75DXN
 GD4UFB
 GW0/EI6EW
 H22H
 H44JA
 HB0/DL1SCX
 HC5K
 HC8VB
 HH2SD
 HH7GE
 HI3JH
 HI500RCD
 HI8LC
 HK0BKX
 HK0EHM
 HL9CU

QSL TO
 G3YMM
 G3DQL
 DL6NA
 OX3IG
 LU9FFA
 VE3HBF
 VE3COP
 VE1DH
 VE3CKF
 VE3XN
 W2PD
 WA4QMQ
 DL3NAZ
 G3PFS
 G3PFS
 VE1CBK
 DJ3FW
 F6FNU
 G6ZY(88CB)
 RW3AG
 KA5ZMK
 KD8IW
 W3HNC
 SM4CWY
 RW3DR
 F6AJA
 F6EZV
 F6CYV
 F6AJA
 F6BFH
 DL1MAM
 F6FNU
 W3HNC
 W3DJZ
 F6FNU
 AJ3H
 W3HNC
 DL1MAM
 F6EYS
 F6FOL
 N7NG
 WA9INK
 DL1MAM
 F6FNU
 F6FNU
 W1FC
 F6FNU
 F6EYS
 F6EYS
 F6EYS
 F6AJA
 IK2CKR
 IK2GNW
 DJ5KQ
 W5JLU
 G4OBK
 G4DYO
 DL8SCC
 EI6EW
 5B4MF
 JR6CMB
 DJ1BP
 KT1N
 KT1N
 KC3VL
 K1DII
 F6FNU
 HI8RCD
 W2KF
 WB9NUL
 WD9DZV
 AA6BB

DX CALL	QSL TO	DX CALL
HV3SJ	IØDUD	T22VU
I4ALU/IA5	I4ALU	T25TT
I8CZW/VP2M	IK8DOI	T27DX
IH9/IT9BLB	IT9BLB	T3ØBC
IK2GNW/FW	IK2GNW	T3ØJL
IY8UN	IK8DOI	T3ØJS
J28EO	F6FYD	T3ØMA
J34LTA	K4LTA	T3ØNL
J52US	WA8JOC	T47CW
J87BN	W1JP	T47DX
J88BN	WA4WIP	T53RC
JA2EZD/AHØ	JH2JCO	T5GG
JA2EZD/WHØ	JH2JCO	T77V
JA8DOK/4S7	JA8RUZ	TA1A
JD1/JR1CAD	JR1CAD	TA1E/2
JTØNP	HA5NP	TD9G
JTØTJ	HA1KSA	TG9GI
JWØB	SP5EVN	TG9VT
JW5E	LA5NM	TI2CF
JW5NM	LA5NM	TI3US
JW6EDA	LA5NM	TI5MRC
JW6VDA	LA5NM	TK5EP
JW6WDA	LA5NM	TL8DN
JX8KY	LA8KY	TL8HB
JY4MB	DJ3HJ	TL8HW
JY5HH	DJ9ZB	TPØCE (SSB)
K1BAZ/DV1	K1BAZ	TR8CR
K2BS/HI8	W2GHK	TR8SA
K2IBW/FJ	K2IBW	TU2QQ
K4YT/4D	KE3A	TU4BU
K4YT/DU8	KE3A	TU4CQ
K9AJ/KH5K	WA2MOE	TU4GR
KB5FFE/P4	P43GR (88CB)	TW4O
KC4USX	WB8ZJB	TW5E
KC6HA	KA6V	TW6A
KH2D	KA3T	TXØA
KH2F	N2AU	TY9SI (CW)
KH6XX	W3HNM	TY9SI (SSB)
KH9AC	WK6T	TZ6VV
KP2AH	WA2YMX	UA1OT
KP4HL/KP5	NG7X	UM8MK
KX6/DL1VU	DL4YAH	V21AO
KX6LJ	N4LZJ	V31AB
LR1V	LU1VZ	V31DX
LSØF	LU1FT	V31KA
LS1E	LU8DPM	V44KAR
LU1E	LU3AJW	V44KQ
LU1ZA	LU2CN	V47KLC
N7ET/DU7	N7ET	V47NX
NJ7D/KP5	NG7X	V47NXX
NO1Z/KH1	VK9NS	VE3CDX/4KØ
OD5VT	HB9CRV	VI88NSW
OH6XY/4U	OH3TY	VK9LC
OK1XC/JT	OK1XC	VK9LF
ON9CDX	ON5NT	VK9NKG
ORØTT	ON7TK	VK9NL/KH1
OY1R	W2KF	VK9YT
P29FG	WAØGUD	VP2EC
P29LB	KC2ZH	VP2MET
PA3AXU/SU	PA3AXU	VP2ML
PJ2/PAØVDV	PAØVDV	VP5DD
PJ2/W1BIH	W1AX	VP5KEL
PJ4CR	WB2LCH	VP8BFM
PYØFC	PY7XC	VP8BKQ
PZ5ES	KX2O	VP8BNO
R4L	UA4LCQ	VP8BPZ
SØRASD	EA2JG	VP8LP
S79D	WB4YZU	VP8VK
SV/KA4NGW	KA4NGW	VQ9KR
SVØFE	KØTLM	VR6ID
SVØFG	KA6UUS	VR6YL
T2ØAA	N4FJL	VU2LE
T22JJ	JR2HCB	VU2TJW

QSL TO	QSL TO
DJ9ZB	DJ9ZB
4X6TT (88CB)	4X6TT (88CB)
4X6TT (88CB)	4X6TT (88CB)
ZL2QW	ZL2QW
AK1E	AK1E
VK9NS	VK9NS
KV4AM	KV4AM
VK9NL	VK9NL
CO7KR	CO7KR
CO7KR	CO7KR
I2JSB	I2JSB
I2MQP	I2MQP
G4UCB	G4UCB
W4FRU	W4FRU
KA1DE	KA1DE
TG9RZ	TG9RZ
IØWDX	IØWDX
W3HNM	W3HNM
W3HNM	W3HNM
TI2US	TI2US
VE3MR	VE3MR
F6EYS	F6EYS
N2AU	N2AU
WB8TGP	WB8TGP
KJ4GK	KJ4GK
F6FQK	F6FQK
F6AJA	F6AJA
F6FNU	F6FNU
F6FNU	F6FNU
N4GMR	N4GMR
WAØNDF	WAØNDF
DJ9GR	DJ9GR
F6AJA	F6AJA
F6AJA	F6AJA
F6AJA	F6AJA
F6HMQ	F6HMQ
DJ6SI	DJ6SI
DK9KX	DK9KX
NØBLD	NØBLD
UB5KW	UB5KW
RA4HT	RA4HT
KE4OC	KE4OC
WA4WIP	WA4WIP
N5DD	N5DD
KM5R	KM5R
WB2LCH	WB2LCH
WB2LCH	WB2LCH
WB2LCH	WB2LCH
AA4FS (87CB)	AA4FS (87CB)
AA4FS (87CB)	AA4FS (87CB)
VE3CDX	VE3CDX
VK2 BORO	VK2 BORO
JH9GRM	JH9GRM
DJ5CQ	DJ5CQ
VK6NKG	VK6NKG
VK9NL	VK9NL
W7SW	W7SW
N5AU	N5AU
W1SD	W1SD
K1RH	K1RH
W1GBO	W1GBO
W3HNM	W3HNM
GM4ILS	GM4ILS
G4ORQ	G4ORQ
G3LZQ	G3LZQ
GW8VHI	GW8VHI
G3VPW	G3VPW
G4RFV	G4RFV
KB6OBG	KB6OBG
KB6ISL	KB6ISL
W6HS	W6HS
K6JG	K6JG
KE3A	KE3A

QSL Information Corrections

- V85AA is not via WØZV, according to WØZV.
- QSL manager of YB8ASX is KØIEA, not KEØOL.

DXers Postal Service Ends

Ron WP2ADC has ended his DXers Stamp Service, as he can no longer finance the \$20/week the service was losing.

Photographic QSL Card Printers

Photographic Concepts QSLs will print photographic QSLs cards for only \$36/100 in small quantities, plus typesetting, etc. They'll pay the \$15 typesetting charges on orders received before June 30. Contact them at Box 6144, Bossier City LA 71171, or call (318) 747-1968.

For those needing QSLs in larger quantities, contact Everett Jackson Jr. WA8CZS, Franklyn Printing Co., 2775 Maple Ave., Zanesville OH 43701 (614) 452-6375. Typical costs are \$300 for 3,000 cards, or \$800 for 25,000 cards, full four-color process.

Old Bureau Cards

What ever happens to QSLs for amateurs who are not members of their local radio society? In many countries, these cards are not delivered to the amateur. Some countries are kind enough to return these to the sender suitably marked. However, J. Balu VU2JBU reports finding lots of old photographic QSLs in a used paper market in Delhi, mixed in with old postcards.

SØRASD QSL Cards

The Lynx DX Group has generated a lot of mail over their QSL policies. QSL bureau workers report stacks of SØRASD cards being returned via the bureau system, even those cards that had donations or direct postage enclosed. Cards are returned in the SAE sent, but without postage. One DXer wrote, "Am I wrong to feel cheated? Instead of the airmail reply I paid for, I received a 2-month ride piggy-backed in my own bureau envelope." [Perhaps this policy wouldn't have angered so many DXers if it had been announced beforehand, and if provisions had been made and publicized for direct return of QSLs. -ed.]

The SØRASD QSL managers also seem to have a problem with 160 meters. One avid Low Bander received his first 160-meter SØRASD card marked "18 MHZ." The card was returned to EA3AOD, whose call appeared on the envelope, with an explanation in Spanish about 18 vs. 1.8 MHz for 160-meter DXCC. Two weeks later a card arrived for 1840 MHZ! A third try resulted in a card for 18 MHz, corrected in contrasting ink to 1.8 MHz. Maybe DXCC Administrator Don Search will be understanding...

A DX Station's Lament

Dear The DX Bulletin:

I am a little perplexed by the habits of the DXers who are so anxious to make DX contacts to get new countries and/or new band-countries, yet they don't send any postage or insufficient postage, much less something extra to cover the costs of the cards themselves. It seems to me that anyone who really wants a card should send a Green Stamp (US\$1), 2 IRCs, or the equivalent in stamps of the country where the QSLs are being processed. This just about pays for the postage and printing.

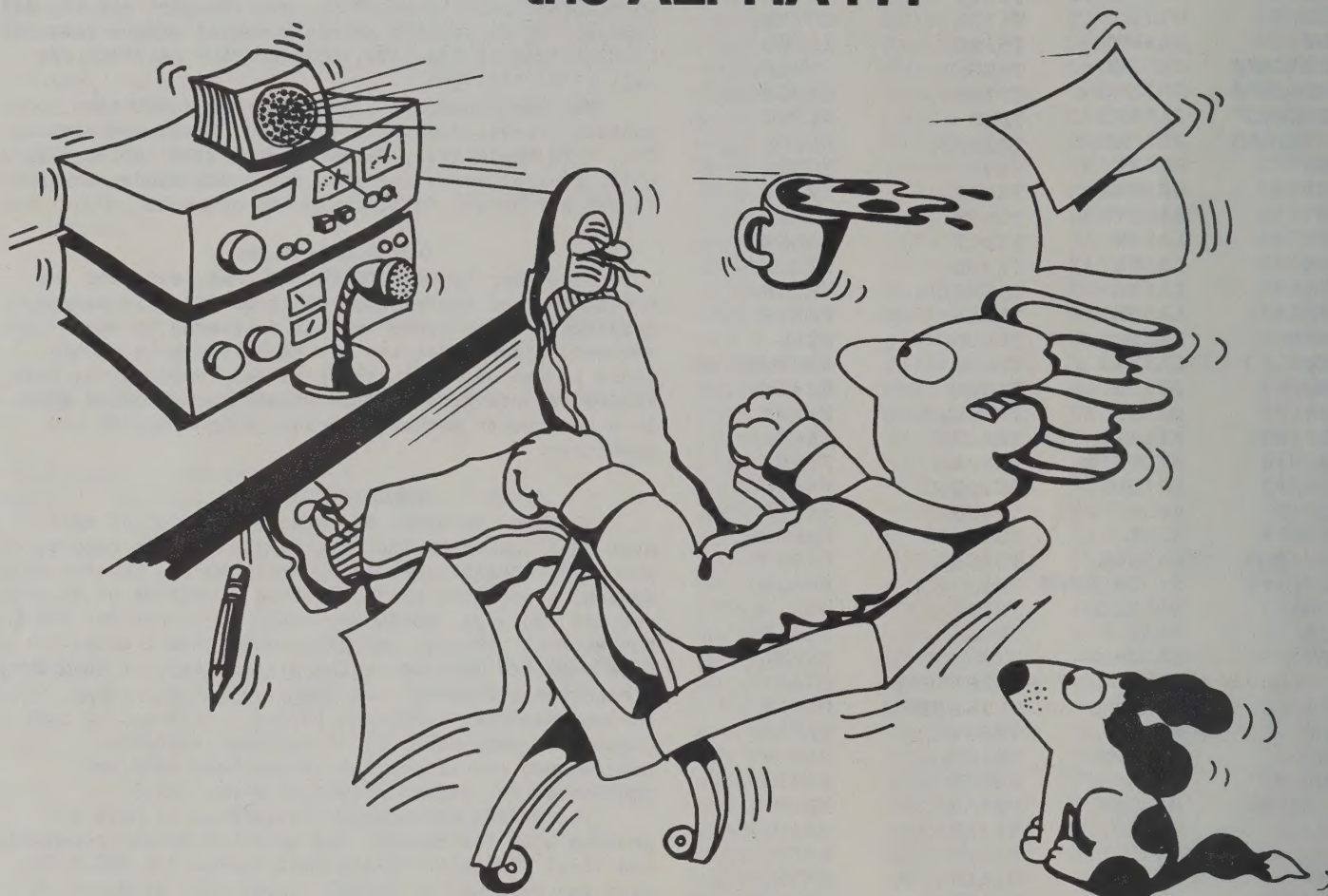
I am not asking for help with expenses for my trips to T3ØMA, KX6/KV4AM, and VP2EMA, but I don't think it is asking too much for a Green Stamp, 2 IRCs, or the equivalent.

I do not fault the 10-15% of DXers who seem to understand and already respond in the above manner: the Europeans, South Americans, and most of the Japanese.

(s) Mac McBirney KV4AM

QSL Information Corrections
 * VBSAA is not via WYV, according to WYV.
 * WYV is not via WYV, according to WYV.
 * WYV is not via WYV, according to WYV.

“... (click) ...
 just turned on
 the ALPHA ...”



ALPHA—The Serious Operator's Choice

Contesters take their amateur radio very seriously. Success in long weekends of tough contesting demands a big signal and outstanding equipment reliability—exactly what every **ALPHA** linear amplifier is designed and built to deliver.

Respondents to the *NATIONAL CONTEST JOURNAL* 1988 Reader Survey do a lot of operating and they tend to favor the big, intensively competitive DX contests. They average over 12 years of operating experience and 89% hold Extra Class licenses. You'd expect them to prefer **ALPHA** amplifiers.

But even we were surprised at the extent to which these top operators choose **ETO/ALPHA** over all other amplifier brands (see table).

Table 4—Comparison of HF Amplifier Manufacturers

NCJ Survey 1988 vs 1981

Manufacturer	1988	1981
Home-brew	23%	17%
ETO-Alpha	21%	17%
Heathkit	20%	37%
Dentron	7%	13%
Drake	6%	—
Ameritron	5%	—
Henry	4%	3%
Amp Supply	3%	—
Other	11%	4%

Table and operator statistics excerpted with permission from March/April 1988 issue of the NATIONAL CONTEST JOURNAL, published by the American Radio Relay League, Inc.

You don't have to be a contester or a DXer to enjoy the benefits of owning an **ALPHA**. If you appreciate fine equipment—if you want maximum legal power available whenever (and for however long) you need it—if you want quality and a factory warranty that takes the worry out—isn't a new **ALPHA** just what you need?

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